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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

14 JUL 2005

Applicant's	or agent's file reference	FOR FURTHER ACT	ION	See Form PCT/IPEA/416	
27434	·				
International application No.		International filing date (de	zy/month/year)	Priority date (day/month/year)	
PCT/IL04/0		15 January 2004 (15.01.20		16 January 2003 (16.01.2003)	
Internationa	Patent Classification (IPC)	or national classification and	IPC		
	B 5/103, 5/117 and US Cl.:	600/587			
Applicant	D.C.I.T. T.M.D.				
	DICAL LTD.				
\	1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.				
2.	This REPORT consists of	a total of 3 sheets, incl	uding this cover she	et.	
3.	This report is also accomp	panied by ANNEXES, cor	nprising:		
	a. (sent to the applica	ant and to the Internationa	al Bureau) a total of	sheets, as follows:	
	sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).				
	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.				
				ndicate type and number of electronic	
carrier(s))					
, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).					
4.	4. This report contains indications relating to the following items:				
	Box No. I B	asis of the report			
ţ		-			
1	=	riority			
	Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability			ovelty, inventive step and industrial	
	Box No. IV L	ack of unity of invention			
	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
		Certain documents cited	1		
	Box No. VII C	Certain defects in the inter-	national application		
	Box No. VIII C	Certain observations on the	e international appli	cation	
Date of submission of the demand		Date of completion of this report			
17 June 2004 (17.06.2004)		18 January 2004 (18.01.2004)			
Name and mailing address of the IPEA/ US		Authorized officer			
Mail Stop PCT, Attn: IPEA/US Commissioner for Patents		Max Hindenburg	Sheila H. Vehey		
P.O. Box 1450 Alexandria, Virginia 22313-1450		May Timenous	Paralegal Specialist 3) 308-085Fech. Center 3700		
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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

international a lation No.
PCT/IL04/00043

Box No. I Basis of the report
1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
This report is based on translations from the original language into the following language which is the language of a translation furnished for the purposes of:
international search (under Rules 12.3 and 23.1(b))
publication of the international application (under Rule 12.4)
international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed"
the international application as originally filed/furnished
the description:
pages 1-11 as originally filed/furnished
pages* NONE received by this Authority on pages* NONE received by this Authority on
the claims:
pages 12-17 as originally filed/furnished
pages* NONE as amended (together with any statement) under Article 19
pages* NONE received by this Authority on
pages* NONE received by this Authority on
the drawings:
pages 1-2 as originally filed/furnished
pages* NONE received by this Authority on
a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.
3. The amendments have resulted in the cancellation of:
the description, pages
the claims, Nos.
the drawings, sheets/figs
the sequence listing (specify):
any table(s) related to the sequence listing (specify):
4. This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
the description, pages
the claims, Nos
the drawings, sheets/figs
the sequence listing (specify):
any table(s) related to the sequence listing (specify):
* If item 4 applies, some or all of those sheets may be marked "superseded."
Form PCT/IPEA/409 (Box No. I) (January 2004)



INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/IL04/00043

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement						
1. Statement						
Novelty (N)	Claims 8-10,1	2,13-18,23-26,30,37-39 and 41	YES			
	Claims <u>1-7,11</u>	,19-22,27-29,31-36 and 40	NO			
Inventive Step (IS)	Claims <u>8-10,1</u>	3-18,23-26,30 and 37-39	YES			
	Claims <u>1-7,11</u>	,12,19-22,27-29,31-36,40 and 41	NO			
Industrial Applicability (IA)	Claims 1-41		YES			
	Claims NONI	,	NO			

2. Citations and Explanations (Rule 70.7)

Claims 1, 2, 5-7, 11, 19, 22, 27, 29, 31, 34, 36 and 40 lack novelty under PCT Article 33(2) as being anticipated by U.S. Patent No. 5,865,801 to Houser. Houser discloses an expandable balloon catheter (12) having an expandable balloon (24) which comprises a plurality of strain gauges (Col. 5, lines 45 - 50) mounted external to a wall of the balloon and a data analysis module. The data module comprises a graphics display (Col. 7, lines 23 - 25). The display is capable of displaying an image obtained from an ultrasound system (Col. 6, lines 5 - 26). The strain gauges report strain through a wire connection (Col. 7, lines 20 - 22). Houser discloses a radio-opaque marker (Col. 4, lines 53 - 57).

Claims 1, 5, 6, 11, 19, 34 and 35 lack novelty under PCT Article 33(2) as being anticipated by U.S. Patent No. 5,902,308 to Murphy. Murphy discloses an expandable balloon catheter having an expandable balloon that comprises a plurality of strain gauges mounted in circumferentially on the balloon (Col. 9, lines 12 - 35). The gauges report strain through a wire connection (66).

Claims 1 - 5, 7, 11, 19-22, 27-29, 31-34 and 40 lack novelty under PCT Article 33(2) as being anticipated by U.S. Patent No. 6,427,089 to Kowlton. Knowlton discloses an expandable balloon catheter having an expandable balloon that comprises a plurality of strain gauges mounted external, internal and embedded in a wall of the balloon (Col. 15, lines 3 - 10) and a data analysis module (Col. 14, lines 64 - 67). The data module comprises a memory module and a graphics display. The display is capable of displaying an image obtained from a medical imaging modality (Col. 16, line 55 - Col. 17, line 5). The strain gauges report strain through a wire connection.

Claims 12 and 41 lack an inventive step under PCT Article 33(3) as being obvious over U.S. Patent No. 5,902,308 to Murphy in view of U.S. Patent No. 3,831,588 to Rindner. Murphy discloses the strain gauges reporting strain through a wire connection (66). However, Murphy fails to disclose the strain gauges reporting strain through a wireless connection. Rindner discloses a catheter having a strain gauge that reports strain either though a wire or wireless connection (Col. 2, lines 17 - 20). It would have been obvious to replace the connection as disclosed by Murphy with a wireless connection as taught by Rindner to make the system less cumbersome by removing a wired connection.

Claims 8-10, 13-18, 23-26, 30 and 37-39 meet the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest a method or system as claimed by applicant.

Claims 1-41 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry related to diagnostic catheters.